

Vol. II.]

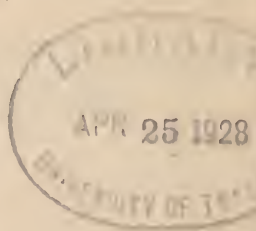
[No. 9.

THE
Canadian Horticulturist,

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The Fruit Growers' Association of Ontario.

SEPTEMBER.



EDITOR:

D. W. BRADEN,

ST. CATHARINES, ONTARIO.

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1879.

THE AUTUMN MEETING
— OF THE —
FRUIT GROWERS' ASSOCIATION

WILL BE HELD IN THE
Town Hall, WALKERTON,
— ON —
Wednesday, the 10th day of September, 1879,

COMMENCING AT 10 O'CLOCK A. M.

Hotel Accommodation, \$1.00 per day. Samples of Fruit
may be sent to the care of

JACOB SEEGMILLER, Walkerton.

THE ANNUAL MEETING
— OF —
The Fruit Growers' Association
— FOR THE —

**ELECTION OF OFFICERS, AND LISTENING TO THE
PRESIDENT'S ANNUAL ADDRESS,**

WILL BE HELD IN THE
CITY HALL, OTTAWA,
On Tuesday Eve. Sept. 23rd, at 7 o'clock P. M.

AMERICAN POMOLOGICAL SOCIETY.

The Seventeenth Session of this Society will be held in the City of Rochester, N. Y., commencing on Wednesday, September 17th, 1879, at 10 o'clock A. M., and continuing for three days. All Agricultural, Horticultural, and Pomological Societies in the British Provinces are invited to send delegates to the meeting.

The meetings of this Society are usually of great interest, and we can assure our friends who may attend that they will doubtless find the occasion one of enjoyment and profit.

The Canadian Horticulturist.

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SEPTEMBER, 1879.

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THE SUMMER MEETING.

According to previous announcement, the Summer Meeting of the Fruit Growers' Association of Ontario was held in the Town Hall, Peterboro', on the 16th July, 1879. A goodly number assembled at ten o'clock on that day, and manifested much interest in the proceedings. There was a display of summer fruits, consisting principally of raspberries and gooseberries, relieved by a very tastefully prepared floral design, in which were many choice and beautiful flowers. This design, we believe, was prepared by one of the ladies of Peterboro', who takes a deep interest in the work of the Association.

President Burnet exhibited to the members the medals which had been awarded to the Association by the American Pomological Society and at the Centennial Exhibition.

After the usual routine business, the President announced that the Rev. V. Clementi, of Peterboro', had very kindly prepared a paper upon "Fruit Growing in the County of Peterborough", and suggested that it be read before proceeding to the discussion of the subjects proposed for the consideration of the meeting. The members listened to the reading of Mr. Clementi's paper with very marked interest, and at its close thanked him most cordially, and requested that it might be published in the CANADIAN HORTICULTURIST, and in the Annual Report.

Mr. Clementi remarked that his paper was not as complete as he desired, owing to the great difficulty he had found in gathering the information which he expected to be able to obtain when he undertook to prepare it, yet such as it was, he was very happy to place it at the disposal of the meeting.

The information given in this paper is just such as the Association seeks to secure, and will be found of great service to those who wish to plant fruit trees in that section. It is as follows:—

FRUIT GROWING IN THE COUNTY OF PETERBOROUGH.

BY REV. V. CLEMENTI.

The object the Fruit Growers' Association has in view in visiting various sections of the Province in the course of its periodical peregrinations, is, I apprehend, of a two-fold character :

1st.—To give the localities visited the benefit of such advice as the experience and intelligent research of its more prominent members may enable them to furnish, and

2nd.—To ascertain by enquiry, and by the inspection of such specimens of fruits as may be submitted for judgment, what kinds are most likely to meet with success in their cultivation in the respective districts, taking into consideration the nature of the soil and the influences of the climate.

And as this is the first occasion of our being favored with a visit by the Association, and as the Town of Peterborough is situated at the distance of thirty miles north of the Grand Trunk R. R., and only on a branch of the Midland, and is consequently but rarely visited, save by those who have business to transact here, or by those in search of beautiful scenery, such as is afforded by our chain of lovely lakes, or by sportsmen in search of game, which may be met with in abundance in our back townships, I venture to occupy your time for a few moments with the briefest possible description of our locality.

The Town of Peterborough is situated on the west bank of the river Otonabee, in the north-east angle of the Township of Monaghan, and, with the county, constitutes a portion of the old Newcastle District. The soil on which the town is built is partly gravel and partly sandy loam, the gravelly portion unfavorable to the production either of fruits or flowers.

The Township of Smith, on the west side of the river, is one of the most valuable and flourishing townships of our county, comprising a large percentage of very excellent land, the soil being principally clay loam, with a subsoil of clay. In some sections it is loamy and calcareous, peculiarly well adapted, where the limestone is not too near the surface, to the culture of fruits.

On the east side of the river is situated the important Township of Otonabee, containing also much good land, and a soil similar to that

of Smith. Both these townships, as well as the Township of Monaghan, are exceedingly favorable for the cultivation of apple trees; indeed, some of the finest apples I have ever seen were produced in the Township of Otonabee, and I cannot but express my regret that the primary visit of the Association to this county had not been paid in the autumn, when we could have placed upon our table a collection of that most useful of all fruits, the apple, such as we flatter ourselves would have contrasted not unfavorably with the collections shown in those districts more especially claiming and securing your notice.

I have endeavored to obtain from those farmers in our neighborhood whose orchards are the best managed, and whose fruits exhibit the strongest indications of such management, a list of apple trees most likely to succeed in the peculiar soil and under the climatic influences of our county. At our Central, our County, and our Township exhibitions—and I may, *en passant*, express my firm belief, founded on no inconsiderable experience, that those exhibitions are of far too frequent occurrence, so much so that our time, our energy, and our money, are, in many instances, frittered away, and our shows become less attractive and less valuable as instructors to the people. At some of those many exhibitions, I say, very superior fruits are often placed upon the tables, but when I inquire as to the circumstances under which those fruits are produced, I receive very meagre and unsatisfactory replies to my appeal for information.

Three farmers, however, residing in the Township of North Monaghan, within a very few miles of the town, have been good enough to furnish me with lists of products of their orchards, and from them I gather that the following kinds may be grown in our county with the best prospect of success:—

Northern Spy, one of the best keeping apples, ...	Winter.
Fameuse, or Snow Apple, ...	"
Red Astrachan, ...	Summer.
*Ribston Pippin, a shy bearer, ...	Winter.
*Golden Pippin, Carver obtained five barrels from one tree, ...	"
Beauty of West, ...	Autumn.
King of Tompkins County, fine, ...	Winter.
*Roxbury Russet, ...	"
*English Russet, ...	"
*Pomme Grise, ...	"

Pine Apple, ...	Winter.
Summer Queen, extra good, ...	Summer.
*Gravenstein, ...	Autumn.
*Duchess of Oldenburg, Russian apple, ...	Autumn.
Tetofsky, very early, Russian apple, ...	Summer.
St. Lawrence, ...	Autumn.
*Colvert, heavy bearer, ...	Autumn.
Sherwood's Favorite, ...	Autumn.
*Yellow Bellfleur, ...	Winter.
Peck's Pleasant, ...	Winter.
*Rawle's Genet, ...	Winter.
*Tolman's Sweeting, ...	Winter.
*American Golden Russet, ...	Winter.
*Red Canada, fine, one of the best keepers, ...	Winter.
American Summer Pearmain, ...	Summer.
Fall Pippin, very fine, ...	Autumn.
Spice Sweet, ...	Autumn.
R. I. Greening, a good apple, but too tender for our climate.	
Early Harvest, good apple, but doesn't always succeed with us.	
Cooper's Market, medium apple.	
Rambo, medium apple.	
Early Joe, an inferior apple.	

Of crab apples, we find the Transcendant and the Montreal Beauty rapid growers and profuse bearers.

This list of apples will probably be considered meagre and imperfect. I may remark, as an excuse for its want of amplitude, that the information I have been enabled to obtain on the subject is scanty too.

I will only add to this portion of my subject, that it is generally allowed by us that a well drained loam soil, lying to the south-east, is the most favorable for orchards. The soil, of course, requires cultivating and manuring, and ashes are found to constitute a good fertilizer. Nor should the mulching of newly planted trees, nor constant pruning, as early as possible in the spring, be neglected. Where it is desirable to secure handsome specimens for exhibition or other exceptional purposes, the thinning out of the fruits, more especially the removal of such as are small or imperfect, must be attended to.

* Good keeping apples.

This paper, referring to the fruit growing capacities of our county, would be more imperfect even than it is were I to abstain from noticing the climatic influences to which we are subjected. Now, our climate cannot compare favorably with the climate experienced, as I imagine, by the majority of the more active and energetic members of the Association, who reside south and west of Peterborough, and who are subjected, more or less, to the influence of our inland sea—an influence that tends greatly to modify the winter frosts and the summer heat.

I may, perhaps, be permitted to introduce a few thermometrical readings. During the last winter the mercury, or rather the spirit, which is more reliable than the mercury, ran down to or below zero on twenty-eight nights, the lowest temperature having been 29° below zero on the 28th of February.

Now, although most apple trees can endure this amount of frost if protected, as our fruit trees are, by a thick covering of snow, from the time it makes its first appearance until spring once more “unlocks the flowers,” some of the more tender varieties cannot withstand the attacks of the late frosts in the early summer, and the constant and severe alterations of temperature. To give but two instances of late frosts in this town:—On the 27th of last May the mercury ran down to 30° , and on the 7th of June to 34° . With respect to the variations, I will trouble you with but one example: On the 9th of last April the lowest reading of my self-registering thermometer was 23° , and the highest 68° —a difference of 45° in 24 hours.

And this I conceive to be the reason why we cannot grow peaches, or some of the choicer varieties of pears and plums, with any prospect of a satisfactory result. For instance, Clapp's Favorite is a much admired pear, but I cannot hear of an instance in which it has succeeded in this county, or the neighboring county of Victoria, where, I believe, it has been frequently tried by skilled orchardists.

Our exhibitions, however, prove that some pears, plums and grapes succeed with us under proper treatment. A member of this Association residing within a very short distance of the town, speaks highly of the Flemish Beauty and Bartlett pears. The same gentleman has grafted four hundred pear trees this year. He has also been successful in cultivating the Apricot Plum, the Peach Plum, the Bradshaw, the Lombard, the Washington, Glass' Seedling, with many others, Green Gage's and blue plums, with the names of which he is unacquainted.

The Apricot Plum is a large greenish-yellow plum, measuring $6\frac{3}{4}$ inches in circumference, and has a very small stone.

The County of Peterborough can by no means claim exemption from the ravages of injurious insects.

The *Galeruca vittata*, commonly called the Cucumber Beetle, appeared on my melon vines in June, in far greater abundance than usual. Being unlike the Potato Beetle, exceedingly active and very wide-awake, it is not so easily captured as its larger and more formidable congener. On approaching a bed, those beetles that are on the surface of the leaves, either fly rapidly away or run beneath the leaves, and dropping to the ground, quickly make their escape. I found the best method of capturing them was by the careful manipulation of a small butterfly net.

Another small beetle that attacked the grape vines about the same time, was one of the flea-beetles, the *Haltica chalybea*. This beetle destroys the buds as well as the leaves of the vines. These beetles are also pretty active, although not so much so as the *Galeruca*. As their name indicates, they hop as well as fly, but I caught the majority of those I found in my garden without much difficulty. They, like the Cucumber Beetles, are very conspicuous in appearance, varying in color from a glossy blue of different shades to a green, and measuring nearly one-fifth of an inch.

The Codlin Moth, *Carpocapsa pomonella*, an unwelcome immigrant from the "Old Country," is a constant visitant. Numbers of the caterpillars may be captured by pinning a piece of old cloth around the trunks of the trees at a short distance from the ground early in the summer, and destroying the *larvæ* that have found shelter there day by day.

The Pear-tree Slug, the *larva* of one of the saw flies, *Selandria Cerasi*, is an occasional visitor, although I have not found them during the present season. They feed on the surface of the leaves of pear, cherry and plum trees, and thus, the lungs being destroyed, the trees ultimately perish, or at all events are unable to mature their fruit.

Last year, during my absence from home in August, the gaudy red-humped caterpillar, the *larva* of the *notodonta concinna*, defoliated a flourishing specimen of the Pomme Grise apple tree which I had received from our Association.

These are some, and a few only, of the garden pests against whose ravages fruit growers have continually to contend. There are many remedies suggested for the purpose of counteracting, or of modifying their attacks, of more or less efficiency, with which I need not occupy your time on this occasion.

Among the worst of these garden pests, however, is the *boy*, and as it is not permitted to poison him, as we poison Potato Beetles and Currant Worms, is one of the most difficult to guard against. Many persons are deterred from cultivating fruits, all from dread of his invasion; for it is not only the loss of fruit that is to be apprehended, but the wanton destruction inflicted by trampled beds and fractured branches. And as a frequent visitor, during the summer months, to the United States, I cannot help contrasting the absence of all such lawlessness and vandalism there with the state of things that subsist in Canada, and the contrast is very much in favor of the Republic. And this is one of many reasons why we ought to use our best exertions to encourage and assist this and other kindred societies, whether for the growth of fruit or the cultivation of flowers, for by so doing we may possibly in time induce all our neighbors to secure a home supply sufficient for the requirements of their families, so that we who incur the trouble and expense of introducing the best products of the garden or the orchard, with the view not merely of gratifying our own palates, but still more of developing the resources of the country and aiding in the progress of science—for science may be brought to bear even upon the management of orchards—and the cultivation of good taste, may not be rewarded by the wanton destruction of our property.

The meeting then proceeded to the consideration of the subject of "Pruning—Season and Method," which was introduced by the following paper from the President, who was requested by the meeting to allow it to be published in the CANADIAN HORTICULTURIST and the Annual Report:

PRUNING.

BY REV. R. BURNET, PRESIDENT.

The horticultural *Savant*, of Germantown, and others, have lately been ventilating the subject of pruning, and the *furor* seems to have reached us, as to-day it has the place of honor in our discussions.

There are indeed few subjects more interesting, and fewer still upon which everybody imagines he can give accurate and practical information for the horticulturist. It is a matter of fact that almost everyone has tried the process; with varying success, it is true, still the trial has been made, and, in the case of many, the results heralded to the world. Strange it would be then if the President of your Association had nothing to say on this matter. I have thought that a few ideas and facts briefly stated might be an apt introduction to our present discussion, and thus give a direction and an impetus to our meeting which it might not otherwise exhibit. I do not flatter myself that I can advance anything new to those who are practical horticulturists, and have made pruning the subject of their thought and experiment for years. In the way of putting the matter, however, there may be something novel, which may afford the occasion of a practical recommendation from our Fruit Growers' Association to the producing world.

Pruning is an ancient art, and has been practiced in the far east from times immemorial. Scripture, too, has its scriptural illustrations from the practice, and asserts that every husbandman "purgeth" the tree, but more especially the vine. It strikes one as odd that a fruit tree requires all this care, while forest and other trees are allowed to develop much as nature dictates.

We have seen all sorts of fancies or conceits wrought by the knife, and trees under the process have been made to assume all sorts of comical and fantastic shapes. We confess that one touch of nature, to us, is of more worth and beauty than a thousand of those phantasies. An important question has always been, When is it best to accomplish this needful purgation? We have thought, and in fact have acted on the thought, that every variety of fruit tree requires almost a different season and method in the operation. Currants require one season, raspberries and strawberries a second, vines, peaches, pears and apples a third, and often the greatest confusion has arisen when speaking and writing of pruning when the variety under treatment has not been distinctly mentioned. Even the two varieties of currants, black and white, require different methods of treatment, though the season of such treatment is the same. A black currant requires as much as possible to be deprived of its old wood, and the encouragement of the young; a white currant needs to be switched like a thorn hedge, and the young wood left short and stubby.

Raspberries thrive under thinning and shortening of the canes after the dry and hot weather, in the end of June and beginning of July, has set in.

I trust I'll not be laughed at when I say that strawberries require as much pruning as almost any other cultivated variety of fruit. We have not seen Mr. Fuller's book on strawberry culture, and therefore cannot speak of his plans, but we can with confidence speak of the method adopted by Mr. Rykert, of St. Catharines, and in imitation of him, adopted by us in the cultivation of our strawberry patch. Successfully to cultivate strawberries, they must be grown in hills or stools, and their runners carefully pruned during the growing season two or three times a week. Plants for fruit ought to be treated after this method; for vines, they ought to be permitted to run at random. With strawberries well pruned, and mulched with clear straw or cuttings from the lawn, the best results may be anticipated.

Mr. Hood, Fergus, in a recent issue of the HORTICULTURIST bitterly complains of the pruning of the grape vine. We esteem his views, and deem them pretty near the mark. Mr. W. Haskins, of Hamilton, once exhibited to the members of our Association, a demonstration of the benefits of allowing vines to run. He attached a bearer from the pole sustaining his vine to the chimney of his cottage, and trained the vine to this wire. The result was fabulous. Enormous crops of large branches of Rogers No. 15 were the consequence. The shy and sparse bearer on the shortening method produced most prolifically when allowed scope and healthy development. To any one who has had the misfortune to prune a vine late in the spring when the sap has begun to flow, it will be a matter of little wonder to hear that a small vine allowed to run can supply sap sufficient to support an immensely long branch or branches, and afford ample nutriment to a large yield. In pruning vines I invariably remove the leading *eye* of the laterals, in this way encouraging the development of the main stem, and only the smallest amount of leaf. The advantages of this treatment are not few. The wood ripens very much with the pruning process, and there is the encouragement given for the perfect development of the future fruit bud. All the summer we consider the best season for pruning the grape vine.

The pruning of the peach requires a deal of consideration. As a rule the peach is a rampant grower, *i. e.* it puts forth in the season a

large amount of small tender shoots, we might with truth say, a profusion of such shoots. Two-thirds at least of these shoots should be removed by the knife in early spring. This process diminishes the amount of fruit buds, and leaves enough for the tree to perfect. For want of this precaution, we have seen very beautiful peach orchards have the fruit almost completely destroyed, or rendered worthless. The trees are allowed to grow their branches so thick and close that even where there is abundance of fruit it prematurely rots, and thus the hopes of the husbandman are crushed.

Pear trees, but not every variety, are the better of close pruning. In the case of the Belle Angevine, we have so short-pruned the branches, that in the course of a few years the whole tree was one mass of fruit spurs, and after a time the tree almost ceased to run to wood, its whole effort apparently being to supply the fruit stems. And so of many other varieties, notably the Flemish Beauty, Duchess d'Angouleme and Belle Lucrative. We have always pruned in spring when carrying on our fruit growing operations; in the fall when experimenting on the best season for the operation. In our climate, winter pruning requires to be done over again, to remove the *winter-kill* at the point of excision. The Beurre d'Amanlis, both the plain and the Panache variety, require their branches to run like long arms, and then the tree will develop long strings of beautiful fruit, and so of some few other varieties. Beurre Diel, White and Gray Doyenne, do well under the shortening process. In treating my pear trees, I always largely summer-prune. I found, I think, the profit of this process in the fruitful result. I am persuaded that the summer-pruned branch developed fruit buds, in some instances, several seasons before they otherwise would on the *laissez faire* system.

Spring is the best season for short-pruning the pear, and summer-pruning after the middle of July is almost a necessity. Care should be exercised not to summer-prune until the spring growths have attained their limit.

Apple pruning is perhaps more important than the pruning of any other fruit tree. It assumes importance from the comparative value of the product. The apple crop of Ontario is incalculably valuable. The right prosecution, therefore, of any process to increase that value and profit is urgently demanded from us as fruit growers. There is first the early pruning necessary for giving a right direction to the tree.

Errors here and there are just like the errors arising from uneducated youth. As the branch is inclined so is the tree. Three or four branches, at the most, are enough to leave on the main stem in the early youthhood of the tree. After the first and second year of growth, all future pruning ought to be directed to the proper training of these early leaders, to secure the highest production from the tree. A husbandman, in the cultivation of an apple tree, should do very much as the judicious medical man, assist nature with his remedies and nostrums. The cultivator has only to assist, not thwart the tree. This is best done by thoughtful removal of redundant branches in summer. What murderous and wasteful pruning we have seen in some apple orchards; treatment, we are bold to affirm, from which the trees will never recover. From early neglect too many leading stems have been allowed. When these are in the way, a wholesale removal with the rough edge of a saw little adapted for the purpose, is had recourse to. Nature vindicates her laws. Blackened matter, after the manner of mourners, surrounds the wound, which itself proves to be the parent of internal rot, eventually destroying the tree. Very few varieties of apple trees require much pruning after the early stages of growth. In fact, to prune full grown trees is exceedingly detrimental. Wherever the saw or chisel has been employed, a multitude of young branches will arise, to the detriment of the tree and of the fruit grower.

In the spring I visited a fruit producer and found him, saw in hand, in his orchard, near the top of an apple tree, which he was most mercilessly thinning out, and putting a rod in pickle for future use to his own back, untaught by the lessons around him outspoken by the various trees which he had formerly mauled. A great reformation is needful in the indoctrination of a better course of pruning. This is to be done by attention being paid to the different treatment different varieties of fruit trees require. To prune apple trees as you prune vines, and vines as you prune apple trees is suicidal. Even pears and apples require different treatment, although so closely allied. Doubtless the discussion of this subject now to be considered, will throw much light on the practice of our horticulturists, and afford the fruit growers of Peterborough the opportunity of contrasting their method and season with those of their brethren further west.

Thanking the members present for their kind attention, and trusting that this effort to suitably introduce the discussion of to-day may

meet with that candid, but sharp criticism, which alone can adequately elucidate any subject, I remain, now as ever, their willing servant.

After the reading, the President called upon the members in rotation to express their views on the subject.

A. C. Dunlop, of Peterboro', said that he prunes his apple trees in the spring, believing that to be the best time. His grape vines he prunes in the fall, and in the summer pinches them in, leaving one bunch on each spur.

W. Jackson, Peterboro', prunes apples, pears and plums in June and July. Plum trees do not seem to require much pruning, and have been very successful in growing them.

John Croil, of Aultsville, prefers to prune apple trees in the middle of June, for then the wounds made by pruning heal up quickly. When necessary to make large wounds applies a thick paint to the cut surface to protect it from the sun and rain. With most persons, early in March is a convenient time to prune, and when pruning is properly and regularly performed, it can be done then as well as at any time. We prune grape vines in the fall, so as to be able to protect them during the winter, and in summer pinch back the shoots, leaving one bunch of grapes on each branch.

P. C. Dempsey, Albury, said pruning needs to be varied according to the object in view. The apple can be trained in very ornamental forms, such as cordons and espaliers, and pruning must be very different when directed to the forming of an espalier or the training of a cordon from that used in forming an orchard tree. When pruning is done to induce a particular growth, it should be performed just as the buds are swelling. When the tree is making too much wood, and we wish to check its exuberance, we prune in mid-summer, thereby removing a portion of the foliage, and inducing the formation of fruit buds. Thinks he has succeeded best with pears when he has let them alone. Those pear trees that he had pruned most carefully had suffered the most from blight. Grape vines should be pruned in the fall, for we must lay them down and cover them with earth to protect them from the severity of the winter, for we have very little snow, and the frost penetrates to the depth of from three to four feet. We prune in the fall to lessen the amount of wood to be covered, and in the summer pinch in the shoots to keep the vine within bounds. Strawberry vines he prunes with the plow, by running a plow with a sharp

coulter, after the fruit is all gathered, near the rows; run about two inches deep and cut off all the runners, then run the harrow over to level the earth back and pull out the runners. In this way the vines may be kept in a narrow strip, and yet allowed to renew themselves, so as to keep the same bed for several years. Prune raspberries by cutting out the old canes, and with the cultivator keep down the suckers.

F. Edwards, Peterboro', prunes his apple trees in the spring, and grape vines in the fall. Pear trees do not yield him any fruit; this year they blossomed well, but all the fruit fell off. Has not been able by any method of pruning to save his gooseberries; most of them mildew very badly.

A. E. Hayter, Millbrook, said that he had between thirty and forty grape vines; that he let them run over the ground as they would, without any pruning at all. In this way he had succeeded in raising good crops of grapes, and well ripened, while those trained on trellises were cut off by the autumnal frosts. He kept the surface of the ground clean, and sprinkled it liberally with ashes.

Chas. Arnold, Paris, used to prune his currants to a single stem, but now he does not prune them any more than to take off what cuttings he wants. In pruning his apple trees he adapts his method to the habit of growth of the variety. The Spy naturally grows like the Lombardy Poplar tree, and needs to be opened out. The Greening, on the other hand, is naturally spreading, and requires pruning in a different way. Considers June and July the best time for pruning, and November and February the worst. The wounded surfaces, if exposed to the severe cold of our winters, cause the tree to suffer. If large branches must be removed would certainly take them off in June, when they will heal over quickly. But very little pruning is needed for plum, cherry or peach trees. Black raspberries should have their canes pinched in, else the fruit will be small. Rogers' grapes should not be severely pruned, they are naturally rampant growers, and should be allowed considerable space. Would prune grape vines in November. He prunes his strawberry vines much after the manner described by Mr. Dempsey, not relying upon the old stool only, but adding to it some young vines.

James Stephenson, Peterboro', treats all his grape vines alike: pruning to two leaders, growing them on a trellis, and in the fall laying them down and covering them with Cedar boughs or with earth.

P. E. Bucke, Ottawa, said some prune their grape vines so as to make them leggy; they should be shortened back sufficiently to keep the whole trellis well covered with fruit and foliage, and not at the extremities only. The Houghton Gooseberry if not pruned will yield only small berries, and the tips of the branches that touch the ground will root. The bushes should be kept well pruned up and free from suckers, this will enable one to combat the Saw Fly to better advantage. Finds that if the bushes are thoroughly sprinkled with water in which a little paris green has been stirred, say a teaspoonful to a pail of water, at the time when they are in blossom, the Saw Flies will not make their appearance again during the season. When the currants are nearly grown he prunes out the suckers and cuts back the young wood. His grape vines he prunes in the fall, so as to lay them down and cover them with earth; prefers earth to Cedar boughs. In summer he pinches in the growing shoots. He grows some of the Rogers varieties, the Creveling does well, the Clinton is the most hardy sort.

A. M. Smith, Drummerville, prunes raspberry plants by removing the old canes and pinching back the young canes when they are about two and a half feet high. The Clarke Raspberry is too soft a berry to ship any distance, but it bears well, and sells well in a near market.

Thos. Beall, Lindsay, thinks that June and July are the best months in which to prune apple trees, just after they have made their spring growth. He prunes his grape vines in the fall, to two eyes, and covers them with corn stalks, after washing them with tobacco water in which he has mixed some lime and a little *nux vomica* to keep the mice from knawing them. Last fall he left his Clinton vine, which had never borne any fruit, upon the trellis without pruning, this spring he pruned it, and now it is loaded with fruit. He finds that the Delaware does not bear severe pruning. In the summer he pinches back the shoots, leaving two leaves beyond the fruit cluster, and when they again start to grow he pinches the new shoots back to one leaf beyond the previous pinching.

W. Saunders, London, prunes his apple and pear trees in the month of March, before the spring work begins. He washes the trunks of his trees with soft soap, or with a solution of washing soda, about the middle of June. He prunes his grape vines on the renewal system.

S. T. Carver, Peterboro', prunes his apple trees early in the spring, also scrapes the bodies and washes with soap suds.

W. Roy, Owen Sound, prunes in June and July; pares any wounds made by the saw with a sharp knife, and when the wound is dry paints it with linseed oil. He prunes pear trees but very little. The grape vines he lays down on the ground in the fall, and they are protected by the snow.

James Wallis, Peterboro', said pear trees generally do not do well here, those that go unpruned do the best. Plum trees need but very little pruning.

The meeting now proceeded to the subject of

TRANSPLANTING SEASON.

Fitzgerald, Peterboro', prefers spring planting, and mulching with strawy manure. Makes the soil fine and tramps it firmly about the roots.

Edwards, Peterboro', also prefers the spring, though he had never tried fall planting. He plants with care, and seldom loses a tree.

W. Jackson, Peterboro', said that 'as his soil was damp he planted shallow, and did not tramp the soil about the roots. Some Maple trees that he transplanted died he believed in consequence of the tramping of the soil about the roots, for some of them that did not get tramped lived. It is important that the soil be got in good order, and the roots spread out with care. Prefers the spring.

S. T. Carver, Peterboro': I never lost a tree in planting; set them the same depth as they grew before, make the soil very fine and settle it about the roots with water, then mulch and stake each tree. I plant only in the spring.

Thos. Allum, Peterboro', tried fall planting but the trees did not do well; spring planting succeeds well. Shortens in the head when planting.

Judge Macpherson, Owen Sound, plants in the spring, and finds from experience that this is the best time.

P. E. Bucke, Ottawa, thought that the failure in transplanting would be very much less if the trees were prepared for it in the nursery by frequent removals. The purchaser could well afford to pay a higher price for trees that had been thus prepared before being sold, for they would rarely fail to grow.

Chas. Arnold, Paris, would indorse what Mr. Bucke had said on the preparation of trees for their final removal by frequent transplanting

in the nursery. The misfortune is that in this country such trees will not sell. It makes them less thrifty in appearance than those that have not been moved, and buyers infer that they are not healthy, and purchase in preference those that in consequence of not having been moved have grown more rapidly and look more thrifty. In England trees rise in price in proportion to the number of times they have been transplanted in the nursery. Spring is the preferable time, and in light porous soils the earth should be tramped firmly about the roots.

W. Roy, Owen Sound, finds that Hemlocks need frequent transplantings when small. In heavy soil he would not tramp the earth about the roots. Plants apple trees thirty feet apart each way.

W. Saunders, London, said that some recommended planting strawberry plants in the fall, but he had found that to be successful it must be done quite early, so that they will become well established before severe weather, else they are very liable to be winter-killed.

A. M. Smith, Drummondville, had been very successful in transplanting canes of the red raspberries in the fall, but could not advise planting strawberries then.

A. E. Hayter, Millbrook, prefers spring planting for most things, though raspberry and gooseberry plants start so early in the spring that he prefers to plant them in the fall.

Dumble, Peterborough: In hard cold soils would plant the trees on the surface, without digging any hole, and cover the roots sufficiently with good mellow earth. There is a difficulty in obtaining trees hardy enough to endure our climate.

Thos. Beall, Lindsay: Don't dig a hole at all in planting trees, but prepare the ground the year before by deep subsoiling and frequent ploughing; leave a furrow where you intend to have the row of trees, then set the trees in the furrow, cover the roots with earth, and then throw the soil back to the trees with the plow. Spring is the more favorable time for transplanting in this climate. Strawberries can be successfully transplanted in the latter part of August if the weather be rainy.

J. McD. Allan, Goderich, prefers fall planting; has planted four hundred trees in the fall and did not lose a tree, and what was more, by being in the ground ready to grow on the first appearance of spring, they have gained almost a year in growth.

To be Continued.

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Our thanks are due to so many kind friends who have so cheerfully placed our little monthly on their exchange list, that we can hardly find space in our narrow limits for more than a hearty "thank you" to each and all. The plan of the **CANADIAN HORTICULTURIST** hardly admits of those courteous notices of friendly exchange which are so becoming and pleasant, else the few pages at our command would be wholly absorbed with them; and yet, perhaps, if these notices only resulted in inducing our members to subscribe for them and read them, they would be much more profited thereby than by any words of ours.

Vick's Illustrated Monthly Magazine, devoted wholly to flowers, contains 32 pages, published by James Vick, Rochester, N. Y., at \$1.25 per annum. Each number has a colored illustration of one or more flowers.

The Iowa Farmer is published monthly, at Cedar Rapids, at 75c. a year, and keeps us well informed on agricultural matters in that western State.

The American Agriculturist has been received regularly, and is always full of matters of interest to tillers of the soil. Each number contains some thirty pages of reading matter, and is profusely illustrated. It is published by the Orange Judd Company, 245 Broadway, New York, at \$1.50 per annum, and issued monthly.

The California Horticulturist is a capital monthly, of thirty pages, full of useful information relating to the productions of the Pacific coast; published at San Francisco, at \$2.50 per annum.

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The Gardeners' Monthly, published at 814 Chestnut Street, Philadelphia, Penn., at \$2.10 per annum, continues under the editorship of Thos. Meehan, and is as ever replete with useful and interesting articles on all manner of horticultural subjects.

The Maryland Farmer, a thirty page monthly, published by Ezra Whitman, 141 West Pratt Street, Baltimore, Maryland, ably discusses all subjects of special interest to the farmer. The subscription price is only \$1.00 per annum.

The Michigan Farmer is published weekly, in Detroit, by Johnstone & Gibbons, at \$2.00 a year. It is a well prepared farmers' family paper.

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The Prairie Farmer is an excellent family paper for the agriculturist, published weekly, at 118 Monroe Street, Chicago, for \$2.00 a year.

The New England Homestead, published weekly, at Springfield, Mass., for \$2.00 a year, is a farmer's family paper, well filled with instructive reading.

The Western Agriculturist is published monthly, in Quincy, Illinois, for a dollar a year, and is devoted to all matters of interest to Western farmers.

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The Fruit Recorder, published monthly, by A. M. Purdy, Palmyra, N. Y., at one dollar a year, is devoted almost exclusively to the cultivation of small fruits, and is full of valuable information.

The Canadian Farmer, published at Welland, Ont., is issued weekly, at one dollar a year, and contains in addition to its agricultural reading much that is interesting to the farmer's family.